REMARKS

The specification is amended at page 7 to refer to a structural member (see page 5, line 20) and claim 7 is amended to refer to a partition material (see page 7, line 14), a structure member (see page 5, line 20) or exterior material (opposite of interior material). A missing expression is added to pages 5 and 14 for clarity and shape of the end faces revised at pages 3 and 5. A typing error is corrected on page 8. These changes are for purposes of consistency and clarification; no subject matter has been added.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made**."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

The paragraph beginning at page 3, line 16:

In the case where the honeycomb core is made of aluminum, it is possible to form air vents on the side walls. However, since the air passages connected to the outside are formed on end faced (edge) of the panel, the formation of the air vents is limited by the shape of the end faces. Likewise, in the case where the honeycomb core is made of a carbon fiber reinforced plastic, the formation of the air vents is limited by the ~~process for forming~~ shape of the end faces of the panel.

The paragraph beginning at page 4, line 27 through page 5, line 24:

With the above honeycomb sandwich panel, the honeycomb sandwich panel, the honeycomb core is not breathable but the front or rear surface layer or both are porous and breathable. Therefore, when the panel is used in a vacuum, the air in the cells goes out through the front and rear surface layers. Thus, since no difference in pressure is made between the inside and the outside of the sandwich panel, the front and rear surface layers are prevented from being damaged or removed from the honeycomb core. As a result, the sandwich panel with high durability can be obtained. Moreover, even when the ambient pressure is returned to a normal pressure or increased above atmospheric pressure, since air flows into the honeycomb core, no excessive force is applied to the honeycomb sandwich panel. The honeycomb core may be made of Nomex, aluminum or a fiber reinforced plastic. Since the front and rear surface layers have air passages

connected to the outside, the shape of the panel is not limited by the ~~process for forming~~ shape of the end faces (edge) of the panel but has a degree of freedom. For example, it is possible to form a panel or a structure member with a closed cross section to improve the torsional rigidity. Thus, the panel or a structure member has (much) more freedom ~~of~~ in designing to achieve required strength. Furthermore, sine no special process is additionally required, the manufacturing cost can be saved.

The paragraph beginning on page 7, line 9

FIG. 1 is a longitudinal cross-sectional view of a honeycomb sandwich panel, and FIG. 2 is a plan view of the honeycomb sandwich panel in which a front surface layer is partially cut away. As shown in FIGS. 1 and 2, a honeycomb sandwich panel 11, which can be used as an interior material, ~~or a~~ partition material or structural member of an artificial satellite or a space station, comprises a honeycomb core 12. The honeycomb core 12 includes a number of cells 12a arranged like a honeycomb, which extend in the thickness direction through the core. The honeycomb sandwich panel 11 also comprises sheets of a front surface layer 13 and a rear surface layer 14 sandwiching the honeycomb core 12 on both sides thereof.

The paragraph beginning on page 8, line 16:

A test piece of the honeycomb sandwich panel comprises a honeycomb core of a hexagonal HRH10-3/16-3.0 (t+12.7 mm) and front and rear surface layers made of a phenol CFRP prepreg, SRC -099E (produced by Sakura Rubber Co., Ltd.). The SRC-099E is so made that it is to be hardened and molded by ean autoclave method, thereby forming the front and rear surface layers.

The paragraph beginning on page 14, line 15:

Based on the results of the experiments described above, it is confirmed that the honeycomb sandwich panel of the present invention can be used even in a vacuum owing to the air permeability of the fiber reinforced plastic using a phenolic resin as the matrix. Moreover, a later process for forming air vents on the side walls of the cells of the honeycomb core is not required, as in the conventional art. Therefore the number of steps is reduced, resulting in a reduction in cost. It is possible to form a panel or a structure member with a closed cross section to improve the torsional rigidity. thus, the panel or a structure member has (much) more freedom in designing to achieve required ~~of~~ strength. The honeycomb sandwich panel is suitable as a component of equipment for use in the aerospace industry, but can be applied to any other field.

IN THE CLAIMS

7. (Amended) A honeycomb sandwich panel for use in an interior material, exterior material, partition material or structural member of a spacecraft comprising:

a honeycomb core having a number of cells ex tending therethrough in a thickness direction of the honeycomb core; and

a front surface layer and a rear surface layer provided on both sides of the cells in the thickness direction of the honeycomb core and closing openings of the cells, at least one of the front surface layer and the rear surface layer being made of a fiber reinforced plastic using a phenolic resin as a matrix.